

Description and Features

The prestressed shell beam units, with the addition of a reinforcing cage and on-site concrete, form a structural beam with clean steel formed appearance. Shell beams are commonly used with Stahlton precast floor systems to streamline building programmes and reduce on-site labour.



Cor slab on shell beams



600mm wide units ready for dispatch

Features

- Shell beams eliminate slow and expensive formwork.
- The steel mould surfaces are of tidy appearance and are suitable for receiving further treatment, eg paint, textured spray, etc.
- The prestressing in the units is utilized in conjunction with the conventional reinforcing to produce maximum efficiency.

Product Data

Application: Suitable for structural beams in most buildings, especially where speed of construction is important.

Design and Manufacture: The precast shell cannot be designed as an isolated structural element. For this reason units are made to details supplied by others. Units are manufactured to length from 40MPa concrete in steel moulds. Maximum prestress 6 strands (12.90 diam 185kN) in 400mm wide units, or 10 strands in 600mm wide units.

All beam shear reinforcing should be designed for incorporation within the in situ core. The beam shells are too thin to accommodate effective shear reinforcing.

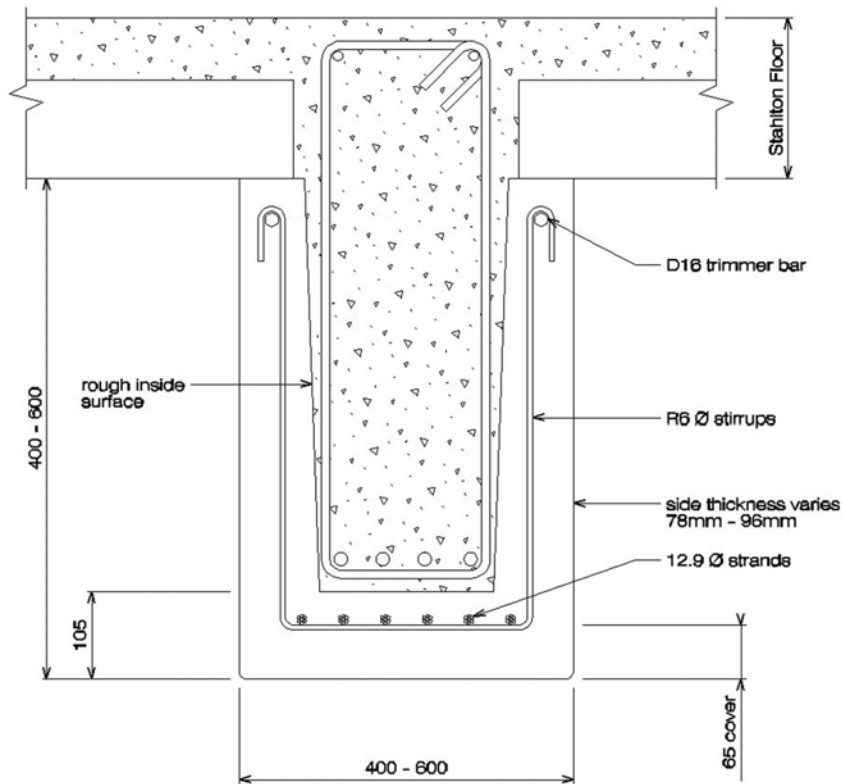
Further Information

Designers should contact Stahlton technical staff early in the design process to ensure the most effective use of, not only the prestressed units, but also the associated structural and architectural detailing. Preliminary design advice, cost estimates and specifications are available on a no obligation basis.

Designers Note

Due to manufacturing and transport arrangements the full Stahlton product range is not available in all regions.

Shell Beam Cross Sections



Shell Beam Cross Sections

Self Weights for Handling

Unit Size	Self Weight (kg/lin m)
400mm wide x 400 mm high	245
400mm wide x 600 mm high	330
600mm wide x 400 mm high	300
600mm wide x 600 mm high	380